

Claims

1. A switchable polymer capable of being influenced by radiation to change from one state to another, comprising a backbone
5 polymeric moiety having a plurality of curable residues bonded thereto, characterised in that the polymer comprises monomer residues each of which monomers comprises at least two reactive groups, one of which is curable but unreactive under conditions under which at least one of the
10 remaining groups undergoes reaction to form the polymer.
2. A polymer according to claim 1 which is adhesive and capable of being influenced by radiation to change from a tacky to a less tacky, state.
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3. A polymer according to claim 1 which is a hardenable material capable of being influenced by radiation to change from a fluid or flexible to a solid or less flexible, or rigid, state.
- 20 4. A switchable composition capable of being cured by radiation characterised in that it includes a switchable polymer according to claim 1.
- 25 5. A switchable composition according to claim 4 which is a switchable adhesive composition, characterised in that it comprises a switchable polymer according to claim 2, or a switchable polymer according to claim 1 which is non-adhesive in admixture with a non-switchable adhesive.
- 30 6. A switchable composition according to claim 4 which is a switchable adhesive composition, characterised in that it comprises a switchable polymer according to claim 3.
- 35 7. A process for manufacturing a switchable polymer according to claim 1, characterised by reacting a monomer precursor of a residue in the backbone of the polymer, which monomer comprises at least two reactive groups, one of which is

adhesive but unreactive under conditions under which at least one of the remaining groups undergoes reaction to form the polymer.

- 5 8. A process for the manufacture of an adhesive composition according to claim 5, characterised by admixing with other conventional components of curable compositions, a switchable polymer according to claim 2, or a switchable polymer according to claim 1 which is non-adhesive together with a non-switchable adhesive.
- 10 9. A curable product comprising a curable composition according to claim 4.
- 15 10. A curable product comprising a backing layer characterised in that the backing layer is substantially coated on at least one surface thereof and/or impregnated or encapsulated with a curable composition according to claim 4.
- 20 11. An adhesive dressing comprising a backing layer characterised in that the backing layer is substantially coated on at least one surface thereof with an adhesive composition according to claim 5.
- 25 12. A hardenable tape or bandage comprising a backing layer characterised in that the backing layer is substantially coated on at least one surface thereof and/or impregnated or encapsulated with a hardenable composition according to claim 6.